

517,023



PCT

(57) Abstract: An apparatus for treating waste material that comprises four major cooperating subsystems, namely a pyrolytic converter (24), a two-stage thermal oxidizer (26), a steam generator (28) and a steam turbine (30) driven by steam generated by the steam generator. In operation, the pyrolytic converter is uniquely heated without any flame impinging on the reactor component and the waste material to be pyrolyzed is transported through the reaction chamber of the pyrolytic converter by a pair of longitudinally extending, side-by-side material transporting mechanisms (42, 43).

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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US02/20362

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : F23G 5/12

US CL : 110/219

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 110/219, 253, 255, 342, 346, 110, 101R, 322

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X ---	US RE 33,776 A (NOLAND) 24 December 1991 (24.12.1991), see figure 1.	1, 2, 5
Y		11, 12, 15-17
X ---	US 4,917,023 A (JONES) 17 April 1990 (17.04.1990), see figure 1.	1
Y		3, 4, 7, 9, 10
Y	US 3,954,069 A (LOKEN) 04 May 1976 (04.05.1976), see figure 1, column 2, lines 39-49.	4, 11, 12, 15-17
Y	US 5,376,340 A (BAYER et al) 27 December 1994 (27.12.1994), see figure 1.	3, 7, 10, 11, 12, 15-17
Y	US 5,921,763 A (MARTIN) 13 July 1999 (13.07.1999), see figure 1, column 9, lines 4-10.	10, 15-17
Y	US 5,088,424 A (SARDARI et al) 18 February 1992 (18.02.1992), column 7, lines 24-26.	9
A	US 5,410,973 A (KUNSTLER et al) 02 May 1995 (02.05.1995), see entire document.	1-17



Further documents are listed in the continuation of Box C.



See patent family annex.

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Date of the actual completion of the international search

05 May 2003 (05.05.2003)

Date of mailing of the international search report

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INTERNATIONAL SEARCH REPORT

PCT/US02/20362

C. (Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 4,504,222 A (CHRISTIAN) 12 March 1985 (12.03.1985), see entire document.	1-17
A	US 5,372,077 A (YEN et al) 13 December 1994 (13.12.1994), see entire document.	1-17